

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION TO THE EXISTING TRAFFIC SIGNAL AT US 40 AND MARIOTTVILLE ROAD IN HOWARD COUNTY. US 40 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION.

INTERSECTION OPERATION

1. NORMAL OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA (6) SIX-PHASE FULLY-TRAFFIC-ACTUATED MODE WITH EASTBOUND AND WESTBOUND US 40 APPROACHES OPERATING CONCURRENTLY. THE SIDE STREET APPROACHS ARE SPLIT, EXCLUSIVE/PERMISSIVE LEFT TURNS WILL BE PROVIDED FOR ON US 40 APPROACHES.

PROJECT CONTACTS

THE CONTACT PERSONS FOR DISTRICT #7 ARE AS FOLLOWS:

MR. ROBERT L. FISHER  
DISTRICT ENGINEER  
PHONE: (301) 624-8102

MR. JOHN CONCANNON  
ASSISTANT DISTRICT ENGINEER - TRAFFIC  
PHONE: (301) 624-8141

MR. JIM BUCKALEW  
UTILITY ENGINEER  
PHONE: (301) 729-8436

MR. RICHARD L. DAFF, SR.  
CHIEF, TRAFFIC OPERATIONS DIVISION  
PHONE: (410) 787-7630

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

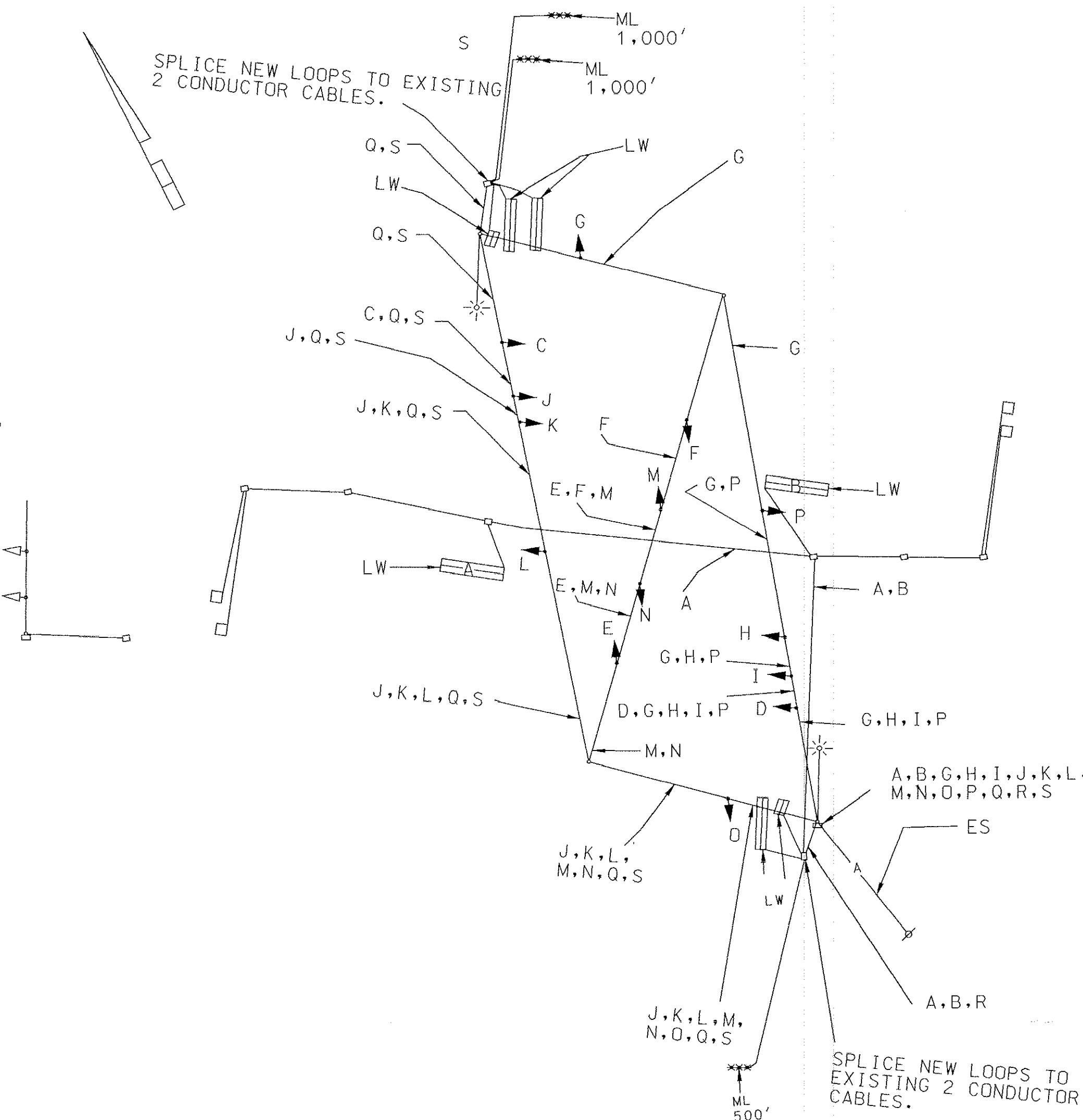
ITEM NUMBER	QUANTITY	DESCRIPTION
9002	2 EACH	FOUR CHANNEL LOOP DETECTOR AMPLIFIERS (DELAY OUTPUT)
9089	53.5 S.F.	SHEET ALUMINUM SIGNS <ul style="list-style-type: none"><li>- 2 EACH R10-12 SIGN (36 IN. x 42 IN.) - "LANE USE CONTROL - LEFT TURN YIELD ON GREEN BALL" SPAN WIRE MOUNT WITH TETHER CLAMP</li><li>- 1 EACH R3-5L SIGN (30 IN. x 36 IN.) - "LANE USE CONTROL - LEFT TURN ARROW ONLY" SPAN WIRE MOUNT WITH TETHER CLAMP</li><li>- 1 EACH R3-6L SIGN (30 IN. x 42 IN.) - "LANE USE CONTROL - COMBINATION LEFT THRU AND RIGHT ARROW" SPAN WIRE MOUNT WITH TETHER CLAMP</li><li>- 2 EACH R3-8 MOD SIGN (30 IN. x 42 IN.) - "LANE USE CONTROL - LEFT TURN AND COMBINATION LEFT THRU AND RIGHT ARROWS" GROUND MOUNT ON WOOD SUPPORT</li></ul>

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NUMBER	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
5002	50 L.F.	5 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5004	165 L.F.	24 INCH WHITE HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
5005	4 EACH	HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LETTER
5006	2 EACH	HEAT APPLIED PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING ARROW
5007	145 L.F.	REMOVE EXISTING PAVEMENT MARKINGS - ANY WIDTH
8009	175 L.F.	FURNISH AND INSTALL STEEL SPAN WIRE 3/8 INCH DIAMETER
8010	700 L.F.	FURNISH AND INSTALL STEEL SPAN WIRE 1/4 INCH DIAMETER
8016	1 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 500 FOOT LEAD-IN
8017	2 EACH	FURNISH AND INSTALL MICROLOOP PROBE SET WITH 1000 FOOT LEAD-IN
8021	1425 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8022	30 L.F.	FURNISH AND INSTALL 1 INCH ELECTRICAL CONDUIT GALVANIZED SLEEVE
8023	51 L.F.	FURNISH AND INSTALL 1 INCH LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
8040	2490 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG)
8041	350 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 2 CONDUCTOR (ALUMINUM SHIELDED)
8044	130 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)
8045	1445 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG)
8051	34 L.F.	FURNISH AND INSTALL WOOD SIGN SUPPORTS 4 INCHES x 6 INCHES
8052	17.5 S.F.	INSTALL GROUND MOUNTED SIGN
8053	36 S.F.	INSTALL OVERHEAD SIGN
8060	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT PER ASSIGNMENT
8067	2 EACH	ADJUST AND RE-RING EXISTING SPAN WIRE
8084	42 EACH	FURNISH AND INSTALL 12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION POLYCARBONATE
8085	12 EACH	FURNISH AND INSTALL 8 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION POLYCARBONATE

WIRING DIAGRAM



WIRING KEY

A,B	} 2-CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)	LW - LOOP WIRE (NO. 14 A.W.G.)
C,D,E,F	} 5-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	ES - EXISTING SERVICE (OVERHEAD)
G,H,I,J,K,L,M,N,O,P	} 7-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)	ML - MICRO LOOP SET
Q,R,S	} MICRO LOOP SET	

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
PHASE 1+5	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1+5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 1+6	R	R	R	R	R	R	R	R	R	R	R	R	R	R
1+6 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 2+5	R	R	R	R	R	R	R	R	R	R	R	R	R	R
2+5 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 2+6	R	R	R	R	R	R	R	R	R	R	R	R	R	R
2+6 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 3	R	R	R	R	R	R	R	R	R	R	R	R	R	R
3 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R
PHASE 4	R	R	R	R	R	R	R	R	R	R	R	R	R	R
4 CHANGE	R	R	R	R	R	R	R	R	R	R	R	R	R	R
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y

REVISIONS	APPROVALS
	TEAM LEADER, TRAFFIC ENGINEERING DESIGN DIVISION
	ASST. CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	CHIEF TRAFFIC ENGINEERING DESIGN DIVISION
	DIRECTOR, TRAFFIC & SAFETY



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION  
GENERAL INFORMATION SHEET  
US 40 @ MARIOTTVILLE ROAD

DRAWN BY: J. GORDON	F.A.P. NO. N/A	TS NO. TS-1622E	SHEET NO. 3 OF 3
CHECKED BY: J. GORDON	S.H.A. NO. N/A	T.I.M.S. NO. D700	
SCALE: NONE	COUNTY: HOWARD		
DATE: 9/25/79	LOG MILE: 13004013.32		